

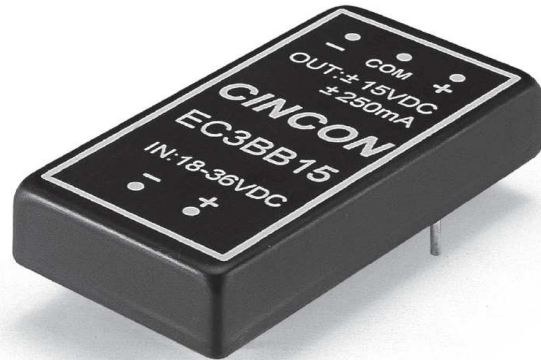


## EC3BB SERIES

### 7.5 WATT 2:1 INPUT RANGE DC-DC CONVERTERS

## FEATURES

- \* 7.5W Isolated Output
- \* Remote On/Off (Option)
- \* Efficiency to 82%
- \* 2" x 1" Case
- \* Regulated Outputs
- \* Continuous Short Circuit Protection
- \* Meets EN55022 Class B, Conducted
- \* Pi Input Filter



MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF.	SIZE
				NO LOAD	FULL LOAD		
EC3BB01	9-18 VDC	5 VDC	1500 mA	7.5 mA	820 mA	76	2"x1"
EC3BB02	9-18 VDC	12 VDC	625 mA	7.5 mA	780 mA	80	2"x1"
EC3BB03	9-18 VDC	15 VDC	500 mA	7.5 mA	780 mA	80	2"x1"
EC3BB04	9-18 VDC	±12 VDC	±310 mA	12 mA	775 mA	80	2"x1"
EC3BB05	9-18 VDC	±15 VDC	±250 mA	12 mA	780 mA	80	2"x1"
EC3BB06	9-18 VDC	±5 VDC	±750 mA	7.5 mA	820 mA	76	2"x1"
EC3BB07	9-18 VDC	3.3 VDC	1500 mA	7.5 mA	557 mA	74	2"x1"
EC3BB11	18-36 VDC	5 VDC	1500 mA	5 mA	400 mA	78	2"x1"
EC3BB12	18-36 VDC	12 VDC	625 mA	5 mA	380 mA	82	2"x1"
EC3BB13	18-36 VDC	15 VDC	500 mA	5 mA	380 mA	82	2"x1"
EC3BB14	18-36 VDC	±12 VDC	±310 mA	7.5 mA	385 mA	81	2"x1"
EC3BB15	18-36 VDC	±15 VDC	±250 mA	7.5 mA	385 mA	81	2"x1"
EC3BB16	18-36 VDC	±5 VDC	±750 mA	7.5 mA	400 mA	78	2"x1"
EC3BB17	18-36 VDC	3.3 VDC	1500 mA	5 mA	271 mA	76	2"x1"
EC3BB21	36-72 VDC	5 VDC	1500 mA	2 mA	200 mA	78	2"x1"
EC3BB22	36-72 VDC	12 VDC	625 mA	2 mA	192 mA	81	2"x1"
EC3BB23	36-72 VDC	15 VDC	500 mA	2 mA	192 mA	81	2"x1"
EC3BB24	36-72 VDC	±12 VDC	±310 mA	3 mA	192 mA	81	2"x1"
EC3BB25	36-72 VDC	±15 VDC	±250 mA	3 mA	192 mA	81	2"x1"
EC3BB26	36-72 VDC	±5 VDC	±750 mA	3 mA	200 mA	78	2"x1"
EC3BB27	36-72 VDC	3.3 VDC	1500 mA	3 mA	136 mA	76	2"x1"

NOTE: 1. Nominal Input Voltage 12, 24 or 48 VDC

# SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

## INPUT SPECIFICATIONS:

Input Voltage Range	12V	9-18V
	24V	18-36V
	48V	36-72V
Input Filter	Pi Type	

## OUTPUT SPECIFICATIONS:

Voltage Accuracy	±2.0% max.	
Voltage Balance (Dual)	±1.0% max.	
Temperature Coefficient	±0.05%/°C	
Ripple & Noise, 20MHz BW	3.3V/5V	100mV p-p max.
	12V/15V	1%p-p mx.
Short Circuit Protection	Continuous	
Line Regulation Single/Dual (note 1)	±0.5% max.	
Load Regulation Single (note 2)	±0.5% max.	
	Dual (note 3)	±1.0% max.

## GENERAL SPECIFICATIONS:

Efficiency	See Table
Isolation Voltage	1500 VDC min.
Isolation Resistance	10 <sup>9</sup> ohms
Switching Frequency	100KHz min.
Operating Ambient Temperature Range	-25°C to +71°C
De-rating. Above 71°C	Linearly to Zero power at 100°C
Case Temperature (note 5)	100°C max.
Cooling	Natural Convection
Storage Temperature Range	-40°C to +100°C
EMI/RFI	Conductive EMI Meet EN55022 Class B
Dimensions	2.00×1.00×0.40 inches (50.8×25.4×10.2mm)
Case Material	Black Coated Copper With Non-Conductive Base
Weight	32.5g

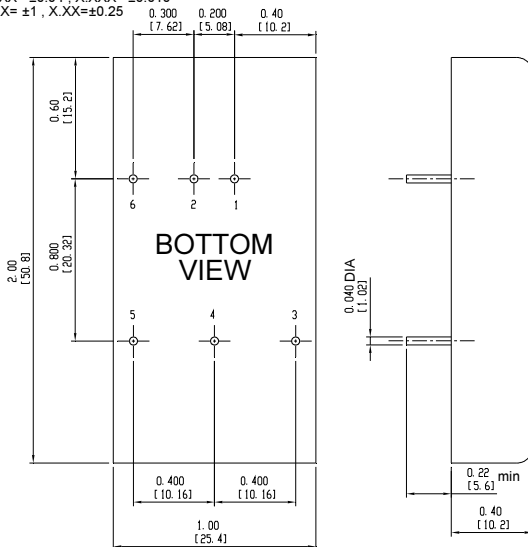
## NOTE:

1. measured from high line to low line.
2. measured from full load to 10% load.
3. Measured from full load to 1/4 load.
4. Suffix "T" to the model number with remote on/off
 

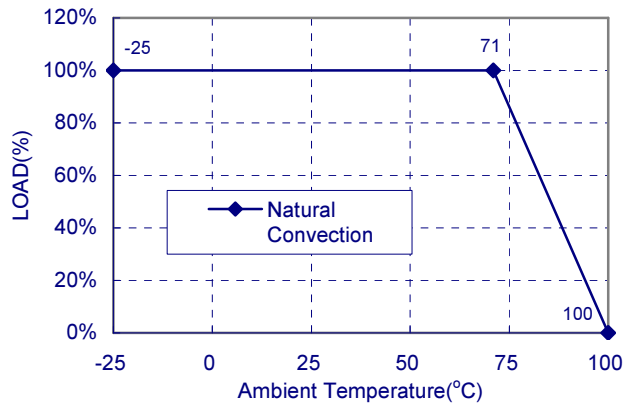
Module on	>5.5Vdc or open circuit
Module off	<1.8Vdc
Shutdown Idle	10mA
Control common	referenced to input minus
5. Maximum case temperature under any operating condition should not be exceeded 100°C

## Case B Dimensions:

All Dimensions In Inches (mm)  
 Tolerances Inches: X.XX= ±0.04, X.XXX= ±0.010  
 Millimeters: X.X= ±1, X.XX=±0.25



Typical Derating curve for Natural Convection



PIN CONNECTION	
Pin	Function
1.	+Input
2.	-Input
3.	+Output
4.	Common/NP
5.	-Output
6.	NP(Remote ON/OFF)

\*NP-NO PIN ON SINGLE OUTPUT